# ARIZONA GAME AND FISH DEPARTMENT HERITAGE DATA MANAGEMENT SYSTEM

Plant Abstract Element Code: PMLIL021N0

Data Sensitivity: No

## CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

**NAME:** Allium parishii Watson

**COMMON NAME:** Parish Onion, Parish's Onion, Wild Onion

**SYNONYMS:** 

**FAMILY:** Liliaceae

AUTHOR, PLACE OF PUBLICATION: S. Watson, Proc. Amer. Acad. Arts and Sci. 17:

380-381. 1882.

TYPE LOCALITY: Mohave Desert, Cushenbury Springs, San Bernardino County, California,

U.S.A.

TYPE SPECIMEN: HT: GH. S.B. Parish 1344 with W.F. Parish, May 1882. IT: MO, NY, US.

**TAXONOMIC UNIQUENESS:** *Parishii* is 1 of 104 species in the genus *Allium*. Based on a study conducted by Ownbey (1947), the genus *Allium* is represented in Arizona by thirteen species, two of which each include two recognizable geographical varieties.

**DESCRIPTION:** Perennial ovoid bulb 1-2, not clustered on primary rhizome, without stalked basal increase bulbs, ovoid, 10-15 x 8-13 mm. The outer coats encloses the bulbs, is brown to reddish brown, membranous, lacking cellular reticulation, and without fibers; inner coats pinkish to reddish brown, cells obscure, rectangular, vertically elongate; sometimes with small side bulbs. The single leaf is persistent, withering from tip by anthesis, basally sheathing, the sheath not extending much above soil level; blade solid, terete, 5-30(-40) cm x 1-3 mm [2-12(-16) in]. Scape persistent, solitary, erect, solid, terete, 5-25 cm x 1-3 mm. The umbel inflorescence is persistent, erect, compact, 6-15-flowered, hemispheric, bulbils unknown; spathe bracts persistent, 2-3, 5-7-veined, ovate, equal, apex acuminate; flowering stem 5-25 cm (2-10 in) long. The flowers are narrowly campanulate, 12-18 mm; tepals erect, spreading at tips, pale pink with darker midveins, lanceolate to lance-linear, equal, inner slightly shorter and narrower than outer, margins entire, apex acute, becoming rigid in fruit. Stamens included, half the length of the petals; anthers yellow; pollen yellow; ovary crested; processes 6, prominent, triangular, margins entire to irregularly denticulate; style linear, equaling stamens; stigma capitate, scarcely thickened, minutely 3-lobed, lobes stout, spreading; pedicel 5-15 mm. Seed coat dull shining; cells minutely roughened. (FNA 1993+, Hickman 1993).

**AIDS TO IDENTIFICATION:** *Allium monticola* (San Bernardino Mountain onion) is distinguished from *A. parishii* by a whitish "bloom" on the leaf. Otherwise, it is much like *A. parishii*. It grows in loose rock in the mountains of southern California. A variety has deep purple flowers. (Steele 1970??).

**ILLUSTRATIONS:** Color photo of Isotype (NYBG, in

http://207.156.243.8/emu/vh/specimen.php?irn306523.

Color photos of Isotype (US National Herbarium, in

http://ravenel.si.edu/botany/types/fullRecords.cfm?myFamily=)

**TOTAL RANGE:** Western Arizona and southeast California (900-1400 meters).

**RANGE WITHIN ARIZONA:** Kofa Mountains, Yuma County. One historic site (1903) from Chemehuevi (Mohave Mountains), Mohave County.

### SPECIES BIOLOGY AND POPULATION TRENDS

**GROWTH FORM:** Herbaceous perennial.

**PHENOLOGY:** Flowers in April to May.

**BIOLOGY:** 

**HABITAT:** Open rocky and sandy lopes in the Mohave Desert, including the desert mountain ranges.

**ELEVATION:** 2,720-2,900 ft. (830-885 m) in Arizona. According to FNA (1993+) elevation ranges from 2,950-4,590 ft. (900-1400 m).

**EXPOSURE:** Found on north-slope in Kofa Mountains, possibly includes other.

**SUBSTRATE:** Rocky.

**PLANT COMMUNITY:** Joshua tree woodland. Based on a 1976 collection in the Kofa Mountains, this plant was found with *Ephedra* (Mormon-tea), *Simmondsia chinensis* (jojoba), *Yucca brevifolia* (Joshua tree), and other shrubs.

**POPULATION TRENDS:** Unknown. In California, CNPS (California Native Plant Society, 1997) considers this plant to be rare, but found in sufficient numbers and distributed widely enough that the potential for extinction is low at this time (CalFlora Database, accessed 5/14/2003).

### SPECIES PROTECTION AND CONSERVATION

**ENDANGERED SPECIES ACT STATUS:** None

STATE STATUS: Salvage Restricted (ARS, ANPL 1999)

[Salvage Restricted (ARS, ANPL 1993)]

OTHER STATUS: Bureau of Land Management Sensitive

(USDI, BLM AZ 2000, 2005, 2008)

**MANAGEMENT FACTORS:** 

**CONSERVATION MEASURES TAKEN:** 

**SUGGESTED PROJECTS:** 

**LAND MANAGEMENT/OWNERSHIP:** FWS – Kofa National Wildlife Refuge.

## **SOURCES OF FURTHER INFORMATION**

#### **REFERENCES:**

Arizona Revised Statutes. 1993. Arizona Native Plant Law, Appendix A.

Arizona Revised Statutes. 1999. Arizona Native Plant Law, Appendix A.

CalFlora Database – Distribution Data. <a href="http://www.csdl.tamu.edu/FLORA/cgi/calmap?n=220">http://www.csdl.tamu.edu/FLORA/cgi/calmap?n=220</a>. Accessed: 5/14/2003.

Flora of North America Editorial Committee, eds. 1993+. Flora of North America North of Mexico. 7+ vols. New York and Oxford.

Harvard University Herbaria. 2001. Index of Botanical Specimens.

http://brimsa.huh.harvard.edu/cms-wb/specimens.jsp. Accessed: 5/14/2003.

Integrated Taxonomic Information System (ITIS). Retrieved 5/14/2003 from ITIS, http://www.itis.usda.gov.

Kearney, T.H., R.H. Peebles, and collaborators. 1951. Arizona flora. Second edition with supplement by J.T. Howell, E. McClintock and collaborators. 1960. University of California Press. Berkeley, California. p.181.

Lehr, J.H. 1978. A catalogue of the flora of Arizona. Desert Botanical Garden, Phoenix, Arizona. p.31.

McDougall, W.B. 1973. Seed plants of Northern Arizona. The Museum of Northern Arizona. Flagstaff, Arizona. P. 98??

Missouri Botanical Garden – TROPICOS, Nomenclatural Data Base. Allium parishii S. Watson. http://mobot.mobot.org/cgi-bin/search\_vast. Accessed: 14 May 2003.

Munz, P.A. 1974. A flora of Southern California. University of California Press. Berkeley, California. P. 876.

NatureServe Explorer: An online encyclopedia of life [web application]. 2002. Version 1.6. Arlington, Virginia, USA: NatureServe. Available: <a href="http://www.natureserve.org/explorer">http://www.natureserve.org/explorer</a>. (Accessed: May 14, 2003).

- Ownbey, M. 1947. The genus *Allium* in Arizona. Research studies of the State College of Washington. 15(4): 228-230.
- Regents of the University of California. 1993. UC/JEPS: TJM treatment for Allium%20parishii. <a href="http://ucjeps.berkeley.edu/cgibin/get\_JM\_treatment.pl?8349,8354,8402">http://ucjeps.berkeley.edu/cgibin/get\_JM\_treatment.pl?8349,8354,8402</a>. Accessed: 5/14/2003 and 8/31/2005.
- Rickett, H.W., general editor W.C. Steele, and collaborators. 1970. Wild flowers of The United States, the southwestern states, Southern California, Arizona and New Mexico. Volume Four, Part One of Three Parts. The New York Botanical Garden, McGraw-Hill Book company. New York. Pp. 30-32.
- SEINet. Collections Search Result. Accessed 8/31/2005 at <a href="http://seinet.asu.edu/collections/list.jsp">http://seinet.asu.edu/collections/list.jsp</a>.
- The New York Botanical Garden. NYBG Specimens Detailed Results. <a href="http://scisun.nybg.org:8890/searchdb/owa/wwwcatalog.detail\_list">http://scisun.nybg.org:8890/searchdb/owa/wwwcatalog.detail\_list</a>. Accessed: 5/14/2003.
- The New York Botanical Garden. NYBG Specimens Search Results. http://207.156.243.8/emu/vh/specimen.php?irn=306523. (Accessed: 8/24/2005).
- U.S. National Herbarium Type Specimen Register (US). Department of Systematic Biology Botany, Smithsonian Institution. <a href="http://rathbun.si.edu/botany/types/">http://rathbun.si.edu/botany/types/</a>. Accessed: 5/14/2003.
- U.S. National Herbarium Type Specimen Register (US). <a href="http://ravenel.si.edu/botany/types/">http://ravenel.si.edu/botany/types/</a>. Accessed: 8/31/2005.
- USDA, NRCS. 2002. The PLANTS Database, Version 3.5 (<a href="http://plants.usda.gov">http://plants.usda.gov</a>). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.
- USDA, NRCS. 2004. The PLANTS Database, Version 3.5 (<a href="http://plants.usda.gov">http://plants.usda.gov</a>). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.
- USDI, Bureau of Land Management. 2000. Arizona BLM Sensitive Species List. Instruction Memorandum No. AZ-2000-018.
- USDI, Bureau of Land Management. 2005. Arizona BLM Sensitive Species List.
- Watson, S. 1882. Contributions to American Botany. Proc. Amer. Acad. Arts Sci. 17: 380-381.

#### MAJOR KNOWLEDGEABLE INDIVIDUALS:

#### **ADDITIONAL INFORMATION:**

**Revised:** 1992-12-07 (DBI)

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